



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/811,442	03/20/2001	Yoshinori Kitahara	HITA.0040	9536
38327	7590	03/02/2005	EXAMINER	
REED SMITH LLP 3110 FAIRVIEW PARK DRIVE, SUITE 1400 FALLS CHURCH, VA 22042				VO, HUYEN X
ART UNIT		PAPER NUMBER		
2655				

DATE MAILED: 03/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/811,442	KITAHARA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Huyen Vo	2655	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

#### A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 13 October 2004.

2a) This action is **FINAL**.                            2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-19 is/are pending in the application.

4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5) Claim(s) \_\_\_\_\_ is/are allowed.

6) Claim(s) 1-19 is/are rejected.

7) Claim(s) \_\_\_\_\_ is/are objected to.

8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 20 March 2001 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All    b) Some \* c) None of:

1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) Notice of References Cited (PTO-892)

2) Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.

5) Notice of Informal Patent Application (PTO-152)

6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Response to Amendment***

1. In response to the office action from 7/14/2004, the applicant has submitted an amendment, filed 10/13/2004, amending claims 1-3, 5-7, 10, 12-14, and 18, while arguing to traverse the art rejection based on amended limitations (See claim amendment). Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection, necessitated by amended claims.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 12 and 14-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Franz et al. (US 6356865).

4. Regarding claim 12, Franz et al. disclose a speech interpretation server, comprising: a unit for displaying a limited plurality of registered model sentences on a display of a mobile terminal (*figures 13-17, displaying recognition candidate phrases/words*); a speech input for receiving an inputted speech in a first language from

a mobile terminal (*302 in figure 3*); a speech recognizer that receives the inputted speech and converts the inputted speech into a prescribed symbol string (*306 in figure 3*); a memory having stored thereon a plurality of model sentences, wherein the prescribed symbol string is present among the plurality of model sentences (*elements 250 and 260 in figure 2*); a language converter that converts the inputted speech converted into the prescribed symbol string into a second language, wherein the second language is different from the first language (*elements 308-310 in figure 3*); and a speech output that outputs the second language in audio to the mobile terminal (*elements 312-314 in figure 3*).

5. Regarding claims 14-16, Franz et al. further disclose the speech interpretation server of claim 12, further comprising: a comparator, wherein said comparator compares the inputted speech to the plurality of model sentences displayed on the terminal in order to generate the prescribed symbol string (*figure 2, the step of comparing the input speech with recognition model in a speech recognition system is well known to a person of ordinary skill in the art*); and wherein each of the plurality of model sentences is classified according to a scene of use (*referring to figures 13-17*); and wherein said speech output comprises a speech synthesizer output that outputs the second language to the mobile terminal in audio (*elements 312-314 in figure 3*).

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over of Franz et al. (US 6356865) in view of Emery et al. (US 5727057).

8. Regarding claim 17, Franz et al. fail to disclose an authorizer, wherein said authorizer identifies the mobile terminal based on at least one identifying characteristic; and a billing database, wherein the mobile terminal correspondent to the at least one identifying characteristic is billed by said billing database for use of the speech interpretation server for a predetermined time. However, Emery et al. teach an authorizer, wherein said authorizer identifies the mobile terminal based on at least one identifying characteristic (*col. 11, line 5*); and a billing database, wherein the mobile terminal correspondent to the at least one identifying characteristic is billed by said billing database for use of the speech interpretation server for a predetermined time (*col. 13, line 60*).

Since the modified Franz et al. and Emery et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Franz et al. by incorporating the teaching of Emery et al. in order to keep track and bill customers of services provided.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over of Franz et al. (US 6356865) in view of White et al. (6408272).

10. Regarding claim 13, Franz et al. fail to disclose a memory comprising a command sentence table, including a plurality of command sentences each of which corresponds to a function of the mobile terminal, wherein said speech recognizer differentiates the plurality of model sentences from the plurality of command sentences. However, White et al. teach a memory comprising a command sentence table, including a plurality of command sentences each of which corresponds to a function of the mobile terminal, wherein said speech recognizer differentiates the plurality of model sentences from the plurality of command sentences (*col. 6, line 32 to col. 7, line 40*).

Since the modified Franz et al. and White et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Franz et al. by incorporating the teaching of White et al. in order to enable the system to control the device as well as provide speech recognition services appropriately.

11. Claims 1-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al (US 6161082) in view of Franz et al. (US 6356865), and further in view of Fushimoto et al. (US 5742505).

12. Regarding claims 1-2, Goldberg et al. disclose a method for providing a speech interpretation service, comprising: providing an interpretation device having resident thereon a plurality of registered sentences to be interpreted (*database 170 in figure 1 contain previously registered phrases in a first language and their corresponding translated phrases in a second language*); receiving speech, in a first language, inputted to the mobile terminal, at the interpretation server (*communication device 100 in figure 1*); recognizing the speech inputted based on a comparison of the inputted speech to the plurality of registered sentences to be interpreted (*col. 6, line 61 to col. 7, line 17, wherein registered sentences are recognition vocabularies/dictionary always include speech recognition system very well known to a person of ordinary skill in the art*); interpreting, by the interpretation server, the recognized speech into a second language, according to said recognizing (*col. 6, line 61 to col. 7, line 17*); and outputting a translation signal correspondent to the second language to the terminal from the interpretation device (*col. 6, line 61 to col. 7, line 17*).

Goldberg et al. fail to specifically disclose the step of displaying the plurality of registered sentences on a mobile terminal display communicatively connected to the server, and displaying in accordance with languages available at the interpretation sever of an interpretable language classification menu on the mobile terminal. However, Franz et al. teach the step of displaying the plurality of registered sentences on a mobile terminal display communicatively connected to the server (*referring to figures 13 and 15-16*).

Since Goldberg et al. and Franz et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Goldberg et al. by incorporating the teaching of Franz et al. in order to enable the user to verify if the input speech was correctly recognized to improve recognition/translation accuracy.

The modified Goldberg et al. fail to specifically disclose the step of displaying in accordance with languages available at the interpretation sever of an interpretable language classification menu on the mobile terminal. However, Fushimoto et al. teach the step of displaying in accordance with languages available at the interpretation sever of an interpretable language classification menu on the mobile terminal (*figures 17 and/or 18A-C*).

Since the modified Goldberg et al. and Fushimoto et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Goldberg et al. by incorporating the teaching of Fushimoto et al. in order to enable the user to specify the multi-language translation system to perform appropriate language translation.

13. Regarding claims 3 and 6-9, Goldberg et al. fail to disclose the step of displaying on the mobile terminal scene options; receiving a scene selection of a model sentence from the scene options; and wherein the interpreting comprises interpreting the inputted speech according to the scene selection; receiving an approval instruction from the mobile terminal of the second language before said outputting a translation signal

correspondent to the second language; wherein the approval instruction is an audio approval instruction given at the mobile terminal, and wherein is the audio approval instruction is a specific spoken word/phrase, and wherein the outputting translation signal corresponds to the second language in accordance with the approval instruction; wherein the approval instruction is a press button approval instruction given at the mobile terminal, and wherein the outputting a translation signal correspondent to the second language in accordance with the approval instruction; and the step of repeating the outputting a translation signal correspondent to the second language in accordance with the approval instruction upon each receipt of the approval instruction.

However, Franz et al. further teach the step of displaying on the mobile terminal scene options (*referring to figures 13 and 15-16*); receiving a scene selection of a model sentence from the scene options (*referring to figures 13 and 15-16, user select a correct phrase/word*); and wherein the interpreting comprises interpreting the inputted speech according to the scene selection (*referring to figures 13 and 15-16*); and receiving an approval instruction from the mobile terminal of the second language before said outputting a translation signal correspondent to the second language (*referring to figures 13 and 15-16, receiving a recognition candidate*); wherein the approval instruction is an audio approval instruction given at the mobile terminal, and wherein is the audio approval instruction is a specific spoken word/phrase, and wherein the outputting translation signal corresponds to the second language in accordance with the approval instruction (*figures 13-17 and or referring to col. 18, line 44 to col. 19, line 42*); wherein the approval instruction is a press button approval instruction given at the

mobile terminal, and wherein the outputting a translation signal correspondent to the second language in accordance with the approval instruction (*figures 13-17 and or referring to col. 18, line 44 to col. 19, line 42*); and the step of repeating the outputting a translation signal correspondent to the second language in accordance with the approval instruction upon each receipt of the approval instruction (*figures 13-17 and or referring to col. 18, line 44 to col. 19, line 42*).

Since Goldberg et al. and Franz et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Goldberg et al. by incorporating the teaching of Franz et al. in order to enable the user to verify if the input speech was correctly recognized to improve recognition/translation accuracy.

14. Regarding claims 4-5, Goldberg et al. further disclose the method of claim 1, wherein the communicative connection is a telephonic audio network connection (*col. 6, lines 44-67*), and wherein the translation signal comprises an audio signal that is outputted via the telephone network (*col. 6, lines 44-67*).

15. Regarding claim 10, Goldberg et al. fail to disclose the method of claim 1, further comprising: narrowing, based on a dictionary database, the ones of the plurality of registered sentences to ones related to the displayed at least one of the registered sentences. However, Franz et al. further teach the step of narrowing, based on a

dictionary database, the ones of the plurality of registered sentences to ones related to the displayed at least one of the registered sentences (*figure 12 or col. 16, lines 22-42*).

Since Goldberg et al. and Franz et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Goldberg et al. by incorporating the teaching of Franz et al. in order to enable the user to verify if the input speech was correctly recognized to improve recognition/translation accuracy.

16. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al (US 6161082) in view of Franz et al. (US 6356865), further in view of Fushimoto et al. (US 5742505), and further in view of Emery et al. (US 5727057).

17. Regarding claim 11, the modified Goldberg et al. fail to teach identifying mobile terminals based on at least one identifying characteristic; and charging a predetermined fee to the identified mobile terminal for the interpreting. However, Emery et al. teach the step of identifying mobile terminals based on at least one identifying characteristic (*col. 11, line 5*); and charging a predetermined fee to the identified mobile terminal for the interpreting (*col. 13, line 60*).

Since the modified Goldberg et al. and Emery et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to further modify Goldberg et al. by

incorporating the teaching of Emery et al. in order to keep track and bill customers of services provided.

18. Claims 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al (US 6161082) in view of Franz et al. (US 6356865).

19. Regarding claim 18, Goldberg et al. disclose a speech interpretation service, comprising: a communication server (*elements 160-170 in figure 1*); a mobile terminal connected to the communication server (*figure 1*), wherein the communication server comprises: a speech input for receiving an inputted speech in a first language from said mobile terminal (*element 100 in figure 1*); a speech recognizer that receives the inputted speech and converts the inputted speech into a prescribed symbol string (*speech recognition process in col. 6, line 61 to col. 7, line 17*); a model sentence table for storing a plurality of model sentences, wherein the prescribed symbol string is present among the plurality of model sentences (*language models and speech recognition models are inherently included in a speech recognition system in col. 6, line 61 to col. 7, line 17*); a language converter that converts the inputted speech converted into the prescribed symbol string into a second language, wherein the second language is different from the first language (*translation software 160 in figure 1*); and a speech output that outputs the second language to said mobile terminal (*figure 1 and/or col. 5, lines 52-59 and col. 6, line 59 to col. 7, line 17*).

Goldberg et al. fail to disclose that the terminal comprises a display that displays at least one selected only from the plurality of model sentences when the speech is inputted. However, Franz et al. teach that the terminal comprises a display that displays at least one selected only from the plurality of model sentences when the speech is inputted (*figures 13-17 for user to select*).

Since Goldberg et al. and Franz et al. are analogous art because they are from the same field of endeavors, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Goldberg et al. by incorporating the teaching of Franz et al. in order to provide audio translation result to users verify if the input speech was correctly recognized to improve recognition/translation accuracy.

20. Regarding claim 19, Goldberg et al. further disclose the speech interpretation service of claim 18, wherein said at least one connection is at least one selected from the group consisting of a mobile internet connection and a telephone network connection (*figure 1*).

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huyen Vo whose telephone number is 703-305-8665. The examiner can normally be reached on M-F, 9-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doris To can be reached on 703-305-4827. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Huyen X. Vo

February 27, 2005

  
SUSAN MCFADDEN  
PRIMARY EXAMINER